

## **Ralph L. Cooper**

### **Present Position:**

Research Biologist & Chief,  
Endocrinology Branch (MD-72),  
Reproductive Toxicology Division, NHEERL  
Telephone: (919) 541-4084  
e-mail: Cooper.Ralph@epa.gov

### **Education:**

B.A., Monmouth College, W. Long Branch, NJ; Psychology, 1968.  
Ph.D., Rutgers University, Newark, NJ; Psychobiology, 1973.  
Postdoctoral Fellowship, Neuroscience Program, Duke University, Durham, NC,  
1973-1975.

### **Previous Positions:**

1984-1996: Chief, Endocrinology/Gerontology Section, RTB, DTD, NHEERL.  
1977-1984: Asst. Professor, Dept. of Psychiatry, Duke University, Durham, NC.

### **Research Interests and Skills:**

Toxicant induced changes in neuroendocrine control of reproductive function.  
Age-related changes in neuroendocrine function.

### **Professional Activities:**

Member, WHO/IPCS Workgroup for Development of an Environmental Health Monograph  
on Principles for Evaluating the Effects of Chemicals on Aged Populations and the  
Ageing Process.

Member, Executive Committee, Triangle Consortium for Reproductive Biology.

Temporary Advisor, World Health Organization.

Member, WHO/IPCS Workgroup for the Evaluation of the Health Effects of Carbendazim  
and Benomyl and Carbendazim.

Member, Peer Review Panel on Reproductive Health, Department of Defense, Defense  
Women's Health Research Program.

Editorial Advisory Board: Experimental Aging Research.

Editorial Advisory Board: Neurobiology of Aging.

Member, Reproductive Toxicology Study Section (RFP reviews) National Institute of Environmental Health Sciences.

Member, Review Panel for Assessing the Biological Effects of Low Frequency Electric and Magnetic Fields. Department of Energy.

Kiawah Island Workshop on Principles and Processes for Evaluating Endocrine Disruption in Wildlife, Kiawah, South Carolina.

SETAC-EUROPE OECD Expert Workshop on Endocrine Modulators and Wildlife.

World Wildlife Fund Workshop on Health Effects of Contemporary-Use Pesticides: The Wildlife/Human Connection.

Chair, Special Emphasis Panel, Conference Grant Applications (R-13) National Institute of Environmental Health Sciences

Participant: Joint US/EU Endocrine Disruptor Research Expert Panel Meeting, Ispra, Italy

Adjunct Assistant Professor, Department of Psychology, Duke University Medical Center, Durham, N.C.

Adjunct Assistant Medical Research Professor, Division of Medical Psychology, Duke University Medical Center

Adjunct Professor, Department of Anatomy, Physiological Sciences and Radiology, North Carolina State University College of Veterinary Medicine.

### **Professional Societies:**

Sigma Xi  
Society for Neuroscience, North Carolina Chapter  
Society for the Study of Reproduction  
Endocrine Society

### **Selected Publications:**

Stoker, T.E., Guidici, D.L., Laws, S.C., Cooper, R.L. The effects of atrazine metabolites on puberty and thyroid function in the male Wistar rat. **Toxicol. Sci.** 67(2):198-206, 2002.

Putz, O., Schwartz, C.B., LeBlanc, G.A., Cooper, R.L., Prins, G.S. Neonatal low- and high-dose exposure to estradiol benzoate in the male rat: II. Effects on male puberty and the reproductive

tract. **Biol. Reprod.** 65(5):1506-17, 2001.

Putz, O., Schwartz, C.B., Kim, S., LeBlanc, G.A., Cooper, R.L., Prins, G.S. Neonatal low- and high-dose exposure to estradiol benzoate in the male rat: I. Effects on the prostate gland. **Biol. Reprod.** 65(5):1496-505, 2001.

Stoker, T.E., Goldman, J.M., Cooper, R.L. Delayed ovulation and pregnancy outcome: effect of environmental toxicants on the neuroendocrine control of the ovary. **Environ. Toxicol. Pharmacol.** 9(3):117-129, 2001.

Narotsky, M.G., Best, D.S., Guidici, D.L., Cooper, R.L. Strain comparisons of atrazine-induced pregnancy loss in the rat. **Reprod. Toxicol.** 15(1):61-9, 2001.

Das, P.C., McElroy, W.K., Cooper, R.L. Alteration of catecholamines in pheochromocytoma (PC12) cells in vitro by the metabolites of chlorotriazine herbicide. **Toxicol. Sci.** 59(1):127-37, 2001.

Laws, S.C., Ferrell, J.M., Stoker, T.E., Schmid, J., Cooper, R.L. The effects of atrazine on female wistar rats: an evaluation of the protocol for assessing pubertal development and thyroid function. **Toxicol. Sci.** 58(2):366-76, 2000.

Cummings, A.M., Rhodes, B.E., Cooper, R.L. Effect of atrazine on implantation and early pregnancy in 4 strains of rats. **Toxicol. Sci.** 58(1):135-43, 2000.

Stoker, T.E., Laws, S.C., Guidici, D.L., Cooper, R.L. The effect of atrazine on puberty in male wistar rats: an evaluation in the protocol for the assessment of pubertal development and thyroid function. **Toxicol. Sci.** 58(1):50-9, 2000.

Das, P.C., McElroy, W.K., Cooper, R.L. Differential modulation of catecholamines by chlorotriazine herbicides in pheochromocytoma (PC12) cells in vitro. **Toxicol. Sci.** 56(2):324-31, 2000.

Laws, S.C., Carey, S.A., Ferrell, J.M., Bodman, G.J., Cooper, R.L. Estrogenic activity of octylphenol, nonylphenol, bisphenol A and methoxychlor in rats. **Toxicol. Sci.** 54(1):154-67, 2000.

Cooper, R.L., Stoker, T.E., Tyrey, L., Goldman, J. M. and McElroy, W.K. Atrazine disrupts hypothalamic control of pituitary-ovarian function. **Toxicological Sciences.** 53:297-307, 2000.

Goldman, J.M., Laws, S.C., Balchak, S.K., Cooper, R.L. and Kavlock, R.J. Endocrine disrupting chemicals: Prepubertal exposures and effects on sexual maturation and thyroid activity in the female rat. A review of the EDSTAC recommendations. **Critical Reviews in Toxicology.** 30: 135-196, 2000.

Stoker, T.E., Parks, L.G., Gray, L.E., and Cooper, R.L. Effects of endocrine disrupting

chemicals on puberty in the male rat: A review of the EDSTAC recommendations. **Critical Reviews in Toxicology** 30:197-252, 2000.

Cooper, R.L., Goldman, J.M., Stoker, T.E. Neuroendocrine and reproductive effects of contemporary-use pesticides. **Toxicology and Industrial Health** 15: 26-36 1999.

Stoker, T.E., Robinette, C.L. and Cooper, R.L. Maternal exposure to atrazine during lactation suppresses suckling-induced prolactin release and results in prostatitis in the adult offspring. **Toxicological Sciences**. 52(1):68-79, 1999.

Crisp, T.M., Clegg, E.D., Cooper, R.L., Wood, W.P., Anderson, D.G., Baetcke, K.P. Hoffmann, J.L., Morrow, M.S., Rodier, D.J., Schaeffer, J.E., Touart, L.W., Zeeman, M.G., Patel, Y.M. Special Report on Environmental Endocrine Disruption: An Effects Assessment and Analysis, **Environmental Health Perspectives Supplement**. 106:11-56, 1998.

Cooper, R.L., Goldman, J.M. and Tyrey, L. The hypothalamus and pituitary as targets for reproductive toxicants. In: ed. By K. Korach, Reproductive and Developmental Toxicology. Dekker, New York ,pp195-210, 1998.

Cooper, R.L. and Kavlock, R.J. Endocrine disruptors and reproductive development: A weight-of-evidence overview. **Journal of Endocrinology**. 152: 159-166, 1997.

Cooper, R.L. Neuroendocrine Control of Female Reproduction. In: K Boekelheide, R.E. Chapin, P.B. Hoyer and C. Harris, (eds.). Female Reproductive Toxicology, vol. 10 Comprehensive Toxicology, Elsevier Science, New York, pp 273-281, 1997.